AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph starting at page 1, line 2 with the following paragraph:

This application is a continuation application of U.S. Application No. 10/280,593, filed on October 24, 2002, which is a continuation-in-part of Application Serial No. 09/999,598, filed on October 24, 2001, ~~and published as US 2003/0075215 A1 on April 24, 2003,~~ which issued as U.S. Patent 6,680,432 on January 20, 2004.

Please replace the paragraph starting at page 7, line 15 with the following paragraph:

If a cell is shaded or otherwise not receiving sunlight, in order for the current to choose the diode path 202, the turn on voltage for the diode path 202 must be less than the breakdown voltage along the cell path 201. The breakdown voltage along the cell path will typically be at least five volts, if not more. The Schottky ~~contact 207~~ junction 111 requires a relatively small amount of voltage to "turn on" – 600 milivolts. However, to pass through the Ge junction 104, the bias of the Ge junction 104 must be reversed, requiring a large voltage. Reversing the bias of the Ge junction 104 requires approximately 9.4 volts, so nearly ten volts are needed for the current to follow the diode path 202 in FIG. 2A. Ten volts used to reverse the bias of the Ge junction is ten volts less than otherwise would be available for other applications. The device illustrated by FIG. 4 is therefore a functioning bypass diode, but an inefficient one from a power utilization perspective.

Please replace the paragraph starting at page 8, line 3 with the following paragraph:

The effect of the metal 107 is to "short" the Ge junction 104 to the base of the Ge cell 104. Because of the short, a minimal voltage is required to pass current between the layer 113 and the Ge substrate. No longer is a high voltage required to force the current through the Ge junction 104. The current flows easily through the "short path" 107. FIG. 2B provides a schematic representation. If the solar cell is shaded, no longer is the cell forced into reverse bias to pass the current of the array string. There is a much less resistive path, requiring a much lower voltage drop, for the current to pass through the bypass diode [[202]] 203. With the addition of the metalization 107, the Ge cell 104 is shorted. As a result, rather than a reverse biased diode with a 9.4 turn-on voltage, the current instead encounters an ohmic resistance path represented by the resistor 204.

Please replace the paragraph starting at page 15, line 18 with the following paragraph:

FIG. 8 is a block diagram 800 illustrating a detailed schematic sectional view showing a triple junction solar cell structure 640 having a bypass diode 620 in accordance with one embodiment of the present invention. Referring to FIG. 8, the block diagram 800 includes a substrate 602, a triple junction solar cell structure 640, a bypass diode 620, a well 650, and a shunt 630. The triple junction solar cell structure 640 further includes a bottom, middle, and top subcells 604-608. The block diagram 800 also includes contact pads 802-806 and anti-reflection coating 808, wherein contact pad 806 is deposited over a lateral conduction layer 610, adjacent to antireflection coating 808 and contact pad 804 is deposited over the bypass diode 620.